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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,675	10/15/2001	Robert F. Dierbeck	1453-00050	3491

26753 7590 04/27/2004

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EXAMINER

LEO, LEONARD R

ART UNIT PAPER NUMBER

3753

DATE MAILED: 04/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/977,675	Applicant(s) DIERBECK, ROBERT F.	
	Examiner Leonard R. Leo	Art Unit 3753	

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-7 and 22-32 is/are pending in the application.
- 4a) Of the above claim(s) 4-7 and 27-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-26, 31 and 32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The amendment filed on February 9, 2004 has been entered. Claims 1-3 and 8-21 are cancelled, claims 4-7 and 22-32 are pending, and claims 4-7 and 27-30 remain withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 22-23, 26 and 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berti in view of Dierbeck (WIPO).

Berti (page 1, lines 23-27) discloses all the claimed limitations except aluminum components.

Dierbeck (WIPO) discloses a heat exchanger comprising a plurality of modules 61 fluidly connected to tanks 73; wherein the exchanger is an all aluminum welded construction for the purpose of providing good heat exchange, low cost and strength.

Since Berti and Dierbeck (WIPO) are both from the same field of endeavor and/or analogous art, the purpose disclosed by Dierbeck (WIPO) would have been recognized in the pertinent art of Berti.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Berti an all aluminum welded construction for the purpose of providing good heat exchange, low cost and strength as recognized by Dierbeck (WIPO). Furthermore, it has been held to be within the general skill of a worker in the art to select a

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known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416

Regarding claim 23, Figure 2 of Berti discloses a “housing.”

Regarding claim 32, Dierbeck (WIPO) discloses an all welded aluminum heat exchanger wherein the tank is composed of aluminum.

Claims 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berti in view of Dierbeck (WIPO) as applied to claims 22-23, 26 and 31-32 above, and further in view of MacPhee.

The combined teachings of Berti and Dierbeck (WIPO) disclose all the claimed limitations except a housing with a partition wall.

MacPhee discloses a heat exchanger comprising a plurality of modules 12 disposed in a housing, the housing defined by a shell 1 with a bottom portion 37 and first fluid openings 2, 3 fluidly connected via partition wall 70, and a cap 51 with chambers 60, 61 in communication with second fluid openings in tubesheet 10 and closing the housing for the purpose of providing a fluid path for the first fluid.

Since Berti and MacPhee are both from the same field of endeavor and/or analogous art, the purpose disclosed by MacPhee would have been recognized in the pertinent art of Berti.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Berti a housing with a partition wall for the purpose of providing a fluid path for the first fluid as recognized by MacPhee.

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Response to Arguments

The rejection in view of Haberski is withdrawn.

Applicant's arguments have been fully considered but they are not persuasive.

Applicant's remarks are not commensurate in scope with the claims. The claims broadly recite a "heat exchanger." A heat exchanger is a device that may be employed in any desired working environment. Therefore, applicant's remarks with respect to a "high temperature" environment are moot. Berti (page 1, lines 20-27) discloses "*The tubes are rectangular in shape and are formed into a panel by sealing their ends, e.g. by welding, to head plates which together with respective cover plates, define respective reservoirs at each end of the panel.*" It is not clear how the disclosure of Berti lends itself to another bonding method other than what is explicitly stated in the passage above. As evidenced by DeRisi or Saperstein, it is well known in the art of heat exchangers to weld aluminum tubes to collared openings in aluminum header plates.

The rejection in view of MacPhee is deemed correct for lack of any arguments by applicant.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry of a general nature, relating to the status of this application or clerical nature (i.e. missing or incomplete references, missing or incomplete Office actions or forms) should be directed to the Technology Center 3700 Customer Service whose telephone number is (703) 306-5648. Status of the application may also be obtained from the Internet: <http://pair.uspto.gov/cgi-bin/final/home.pl>

Any inquiry concerning this Office action should be directed to Leonard R. Leo whose telephone number is (703) 308-2611.



LEONARD R. LEO
PRIMARY EXAMINER
ART UNIT 3753

April 23, 2004